CLAIM REJECTIONS

REMARKS

Claims 1-5, 8-11, 13, 14, 16, 18, and 19 are pending. Claims 6, 7, and 15 have been canceled. Claims 12, 17, and 20 have been withdrawn. Claims 1, 9, and 14 are amended herein. No new matter has been added as a result of the amendments.

35 U.S.C. §103 Rejections

Claims 1-5, 8-11, 13, 14, 16, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatada et al. (US 5,077,601), in view of Moss et al. (US 5,546,272).

The Examiner is respectfully directed to currently amended independent Claim 1, which recites a device for removing heat from an electronic component, comprising:

a heat sink adapted to couple to said electronic component and conduct heat there from; and

an appurtenance having a plurality of fins coupled to said heat sink and adapted to transfer said heat into a fluid medium, said fins oriented at an angle with respect to a plurality of flow streams of said fluid medium, wherein spaces between said fins are substantially even and said flow streams flow in unique directions from a first end of at least two separate sets of said fins towards a

second end opposite from said first end;

wherein a first fan and a second fan are substantially orthogonal with respect to one another and direct at least a first flow stream and a second flow stream in said unique directions substantially horizontally with respect to said first end into said spaces to provide a motive force to said flow streams.

Currently amended independent Claims 9 and 14 include similar limitation as recited in currently amended independent Claim 1. Also, Claims 2-5 and 8 depend from Claim 1 and recite further limitations of the Claimed invention. Similarly, Claims 10, 11, and 13 depend from Claim 9 and recite further limitations of the Claimed invention. Further, Claims 16, 18, and 19 depend from Claim 14 and recite further limitations of the Claimed invention.

Applicant respectfully assets that the present invention is neither shown nor suggested by the Hatada reference or the Moss reference alone or together.

Hatada does not teach or suggest, either by expressly or inherently the limitations recited in currently amended independent Claim 1 "a heat sink adapted to couple to said electronic component and conduct heat there from; and an appurtenance having a plurality of fins coupled to said heat sink and adapted to transfer said heat into a fluid medium, said fins oriented at an angle with respect to a plurality of flow streams of said fluid medium, wherein spaces between said fins are substantially even and said flow streams flow in unique directions from a first end of at least two separate sets of said fins towards a second end opposite from said first end; wherein a first fan and a second fan

are substantially orthogonal with respect to one another and direct at least a first flow stream and a second flow stream in said unique directions substantially horizontally with respect to said first end into said spaces to provide a motive force to said flow streams." (emphasis added)

Specifically, nowhere in the Hatada reference does it show "wherein a first fan and a second fan are substantially orthogonal with respect to one another and direct at least a first flow stream and a second flow stream in said unique directions substantially horizontally with respect to said first end into said spaces to provide a motive force to said flow streams." (emphasis added)

The Moss reference fails to overcome the deficiencies of the Hatada reference. Although Figures 3 and 4 of Moss reference show a first fan and a second fan, the fans are aligned in a parallel manner. In other words, in the Moss reference, the plane defined by the first fan is parallel to the plane defined by the second fan. This specific design in Moss is crucial as it is for "providing a pathway for air communication between the first and second cooling fans, the first and second fans cooperating to provide an optimum rate of air flow..." (column 3, lines 5-30)

Clearly then, currently amended independent Claim 1 recites features that are very different from Moss. In particular, Claim 1 recites in part: "wherein a first fan and a second fan are substantially orthogonal with respect to one another and direct at least a first flow stream and a second flow stream in said unique directions substantially horizontally with respect to said first end into said

spaces to provide a motive force to said flow streams." (emphasis added) In other words, in currently amended independent Claim 1, the plane defined by the first fan and the plane defined by the second fan are substantially orthogonal. Thus, Moss alone or in combination with Hatada fail to teach, suggest, or render obvious the limitations recited in currently amended independent Claim 1.

Therefore, Claims 1, 9, and 14 are in condition for allowance. Also, Claims 2-5 and 8 dependent from Claim 1, Claims 10, 11, and 13 dependent from Claim 9, and Claims 16, 18, and 19 dependent from Claim 14 overcome the Examiner's prior basis for rejection under 35 U.S.C. 103(a) as dependent on allowable base claims.

SUMMARY

In view of the foregoing remarks, the Applicant respectfully submits that the pending claims in the instant patent application are in condition for allowance. The Applicant respectfully requests reconsideration of the Application and allowance of the pending claims.

If the Examiner determines the prompt allowance of these claims could be facilitated by a telephone conference, the Examiner is invited to contact David Plettner at (408) 447-3013.

Respectfully submitted,

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